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# **Imagery Analysis Monthly Review**

**August 1979**

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# **Imagery Analysis Monthly Review**

**August 1979**

The information and judgments presented in this publication were derived principally from analysis of imagery. Although information from other sources of intelligence may be included for background, this publication does not reflect an all-source assessment and has not been formally coordinated within CIA. (U)

Comments and queries on the contents of this publication are welcomed. They should be directed to the analyst whose name and green line extension appear after each article. (U)

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## Imagery Analysis Monthly Review

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ChinaAdditional Units Deployed to  
Wulumuqi Military Region (S)

Satellite photography shows that since late 1978 the Chinese have formed a new artillery division and added a tank regiment to their ground forces in the Wulumuqi (Wu-lu-mu-chi) Military Region. In addition, NSA reports an infantry division deployed from Chengdu (Cheng-tu) Military Region to Wulumuqi Military Region between April and May 1979. These force improvements were probably prompted by China's concern over increased tensions with the Soviets resulting from China's incursion into Vietnam. Prior to these additions, main force units in the region consisted of five infantry divisions, one artillery division, and one tank regiment, all of which were present prior to 1975.

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Although China has continued to improve its defenses along the border with the Soviet Union and Mongolia, this effort was, until recently, concentrated in the northeast. The Chinese efforts to strengthen their forces in the northwest apparently began in late 1976 when the Chinese began forming a new infantry division and a probable antitank division in Lanzhou (Lan-chou) Military Region. The recent addition of units to Wulumuqi Military Region probably reflects a continuing effort to strengthen their defenses in this area.

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The new artillery division, located at Wulumuqi, was formed between late January and June 1979. It is equipped with at least 104, and possibly as many as 144, 152-mm gun-howitzers. This division also appears to include two additional regiments recently identified in Wulumuqi--a multiple rocket launcher regiment equipped with 36 BM 14-17s and a probable antitank regiment equipped with at least 26 probable antitank guns. These regiments most likely are also newly formed, although the possibility that they may have been redeployed to Wulumuqi from other locations within the military region cannot be ruled out.

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The new tank regiment was deployed to Hejin (Ho-ching) between November 1978 and March 1979. It is equipped with 80 Type-59 tanks, 11 armored personnel carriers, and various pieces of support equipment.

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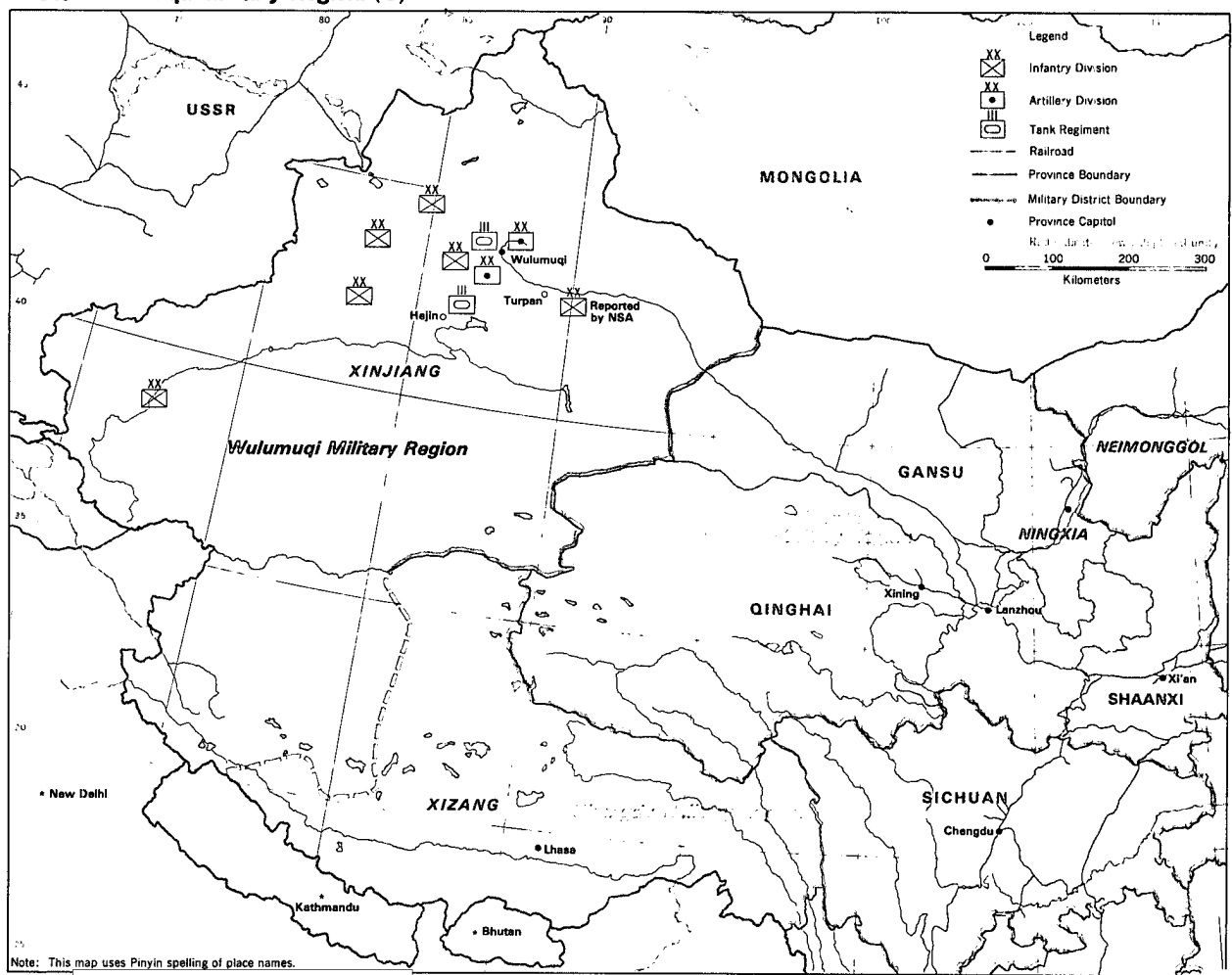
The NSA reports stated that the 11th Infantry Division Headquarters along with its three subordinate infantry regiments and its artillery regiment were redeployed from Chengdu Military Region to the Turpan (Turfan) area of Wulumuqi Military Region in April and May 1979. Photographic evidence indicates that the 11th Infantry Division did vacate its garrisons in Chengdu Military Region. However, we lack recent imagery to confirm this division's redeployment to the Turpan area.

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**Location of Main Force Units  
in the Wulumuqi Military Region. (S)**



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ChinaOutfitting of Space or Missile Instrumentation Ships (TSR)

Two Yuan Wang-class Chinese space or missile instrumentation ships are being outfitted with long-range communications, optical tracking, and telemetry tracking equipment at the Shanghai (Shanghai) Shipyard Jiangnan (Kiang-nan). When completed in late 1979, these instrumentation ships will supplement China's land-based tracking network, presently consisting of 10 space tracking facilities, by extending the tracking range. The Chinese have previously stated that they planned to build three instrumentation ships to support their satellite program. However, the instrumentation ships could also be used in the future for tracking ICBM tests. [REDACTED]

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China began construction of the two instrumentation ships in early 1977 at Shanghai and they were launched by late 1977. Pedestals for instrumentation were observed at this time. After conducting preliminary sea trials, both ships returned to Shanghai and by early May 1979 installation of instrumentation had begun. By the end of May, a telemetry antenna, an environmental dome probably for housing an optical tracking device, and two communications antennas had been mounted on one of the ships. Two communications antennas similar to those on the first ship had also been mounted on the second ship. [REDACTED]

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ChinaAntitank and Air Defense  
Capabilities of Infantry Regiments Upgraded (S)

The Chinese are upgrading the air defense and antiarmor capabilities of their infantry regiments by introducing ZPU-2 antiaircraft heavy machineguns and 85-mm antitank guns to these units. These weapons are in addition to the antiaircraft and antiarmor assets held at division and army level. With their newly assigned weapons, infantry regiments will now be less dependent on higher level fire support units for defense against enemy aircraft and armor. These force improvements conform to views recently expressed in the Liberation Army Daily citing the need to strengthen infantry units' antiarmor and air defense capabilities. [REDACTED]

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Since the mid-1970s, a battery of nine ZPU-2 antiaircraft heavy machineguns has been added to at least 40 infantry regiments throughout China. Although ZPU-2s are an old weapons system, they do provide a measure of defense against low-flying aircraft and can also be used in a ground-support role. [REDACTED]

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A battery of six 85-mm antitank guns has been identified with at least 23 infantry regiments. These batteries were first deployed to infantry regiments in the Beijing (Peking) Military Region beginning in the early 1970s. More recently, however, these weapons have been added to infantry regiments in other military regions, suggesting they will become standard weapons organic to infantry regiments throughout China.

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ChinaNew Large Railcar Observed (U)

The largest railroad car ever observed in China was identified at the Qiqihar (Chi-chi-ha-erh) Railroad Locomotive Repair and Car Manufacturing Plant [REDACTED] The new car is a Schnabel side beam car approximately 62 meters long. Large cylindrical tanks mounted over the axles near each end of the car are probably hydraulic devices designed to allow the body of the car to shift laterally and vertically while negotiating turns or grade changes. Schnabel cars are specially designed to transport large or heavy loads such as transformers, generators, nuclear reactor vessels, and ship components; however, the intended use of the Chinese railcar is not known. The largest known Schnabel side beam car in the US is 74 meters long and has a capacity of 550 tons. [REDACTED]

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The Qiqihar plant primarily produces gondola cars and assembles crane cars. Schnabel cars have been seen at the plant before but none exceeded 45 meters in length. [REDACTED]

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North KoreaMunitions Explosion Destroys Section of Hungnam (TSR)

[redacted] the explosion [redacted] occurred in Hungnam on 1 March 1979 did extensive damage to the surrounding area. [redacted] four railcars loaded with 200 tons of artillery and other ammunition blew up in Hungnam rail yard killing over 150 people, injuring many more, and causing "turmoil" in the city. In addition, the explosion was reported to have extensively damaged rail facilities, interrupted communications, closed Hungnam port for over 10 days, and prompted the evacuation of all foreigners. [redacted]

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Imagery shows the munitions railcars were apparently near the rail station when they exploded. The force of the explosion destroyed portions of the rail yard and all the structures within 100 meters of the initial blast, including the rail station, and about 25 other buildings. Most of the buildings within 300 meters of the rail yard sustained at least some structural and roof damage. Three large warehouses were completely leveled and a number of other buildings were heavily damaged. An examination outside the immediate blast area indicated scattered roof damage to a large number of industrial and civilian facilities as far away as 1,200 meters. The nature of the damage suggests it was caused by artillery rounds that exploded on impact after being thrown by the initial blast. [redacted]

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The most significant industrial facility damaged was the Hamhung Machinery Plant Yongsong which is involved in the production of artillery. Two foundries and one large assembly building sustained roof damage, but we could not assess the damage to the internal machinery. We expect this plant will experience at least short-term delays in production. [redacted]

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A comprehensive reconstruction effort apparently began immediately following the 1 March explosion. Imagery of late March and early April showed large amounts of debris cleaned up at the destroyed warehouses and reconstruction efforts under way within the rail yard and at a number of nearby buildings. On the latest imagery of Hungnam dated 11 June, efforts to rebuild or repair the damage were observed in about three-quarters of the affected industrial and civilian areas. [redacted]

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LibyaFirst Submariners Training School in Arab World Identified (S)

The first submariners training school in the Arab world has been identified on recent satellite photography of Tubruq, Libya. The school, which is still under construction, is located about 3 kilometers north-west of the Tubruq Naval Base. Libya currently has three Soviet F-class submarines and has contracted for three more from the Soviets. In addition, Libya is reported to be negotiating with Spain for the construction of submarines of a French design. Other than Egypt, Libya is the only Arab country which operates submarines. [redacted]

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Probable surveying and ground clearing for the school were noted in April 1978 and actual construction of the facilities began in August 1978. By June 1979, a swimming pool and one probable engineering training building had been completed and an escape training tower was under construction along with a second probable engineering training building. Footings for two large buildings, probably classrooms, were also present. A nearby barracks area is probably being used to house construction personnel and may be used to house the school's students when the facilities are complete. [redacted]

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The submarine escape training tower is the most notable feature of the school. This tower is 34 meters high and is built around 3.5-meter-diameter tank. The tower will be used to train students in submarine escape techniques from depths probably as great as 30 meters. The Tubruq tower is similar in design to an escape training tower operated by the Indian Navy at its training school at Vishakhapatam. Besides the escape training tower, the school will probably also have facilities for submarine propulsion and weapons training. [redacted]

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New OIA Publications (U)

The following reports have been published by the Office of Imagery Analysis since the last issue of the Imagery Analysis Monthly Review.

Imagery Research Papers

1. IS 79-10082K [ ] Status of New Construction Hall and Launch Basin, Severodvinsk, USSR, June 1979 (TOP SECRET RUFF/ [ ]  
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2. IS 79-10097K, [ ] Urea Production Facilities in China, July 1979 (TOP SECRET RUFF/ [ ] 25X1  
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3. IS 79-10088K, [ ] Photographic Analysis of SS-X-16 Test Activity at Plesetsk Missile and Space Center, July 1979 (TOP SECRET RUFF/ [ ] 25X1  
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4. IS 79-10091K, [ ] Romanian Petroleum Refining Industry, July 1979 (TOP SECRET RUFF/ [ ] 25X1  
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5. IS 79-10105JX, [ ] Possible MHD/High Energy Laser R&D at the Primorsk Rocket Engine Test Facility, July 1979 (TOP SECRET  
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6. IS 79-10110K, [ ] Photographic Analysis of the North End of Facility A, Sary Shagan R&D Complex, USSR, July 1979 (TOP SECRET RUFF/ [ ] 25X1  
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7. IS 79-10096K, [ ] Soda Ash Production Facilities in China, June 1979 (TOP SECRET RUFF/ [ ] 25X1  
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8. IS 79-10109K, [ ] Naberezhnyye Chelny Motor Vehicle Plant Kama River, June 1979 (TOP SECRET RUFF/ [ ] 25X1  
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9. IS 79-10089K, [ ] Production and Erection of SS-20 IRBM Sliding Roof Buildings, June 1979 (TOP SECRET RUFF/ [ ]  
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10. IS 79-10094K, [ ] Construction of New Antiballistic Missile Silos at Launch Complexes B and F, Sary Shagan MTC, USSR, June 1979 (TOP SECRET RUFF/ [ ] 25X1  
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11. IS 79-10080K, [ ] Status of New Construction Hall and Launch Basin, Severodvinsk, USSR, June 1979 (TOP SECRET RUFF/ [ ]  
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12. IS 79-10077K, [ ] Chinese Railroad Rolling Stock Manufacturing Plants, June 1979 (TOP SECRET RUFF/ [ ]  
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Imagery Analysis Memorandums

1. IS 79-10100K, [REDACTED] Indications of a Possible Upcoming Rhodesian Airborn Assault (TOP SECRET RUFF) 25X1
2. IS 79-10108K, [REDACTED], Rhodesian Air Force Order of Battle (TOP SECRET RUFF/[REDACTED]) 25X1  
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3. IS 79-10102K, [REDACTED] Ground Forces Installations in Phodesia (TOP SECRET RUFF/[REDACTED]) 25X1  
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4. IS 79-10112K, [REDACTED], Algerian Mechanized Infantry Brigade Transferred to Tindouf Area (TOP SECRET RUFF/[REDACTED]) 25X1  
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5. IS 79-10116K, [REDACTED], Soviet Military Equipment Deliveries to Cuba, April 1978 through March 1979 (TOP SECRET RUFF) 25X1
6. IS 79-10118K, [REDACTED], Artillery Upgrading in Egyptian Divisional Artillery Brigades (TOP SECRET RUFF/[REDACTED]) 25X1  
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7. IS 79-10114K, [REDACTED], Status of Hardened Aircraft Shelter Construction at Three Major Cuban Airfields (TOP SECRET RUFF) 25X1
8. IS 79-10113K, [REDACTED] Construction of New Facilities to Support Space Launches at Plesetsk (TOP SECRET RUFF) 25X1
9. IS 79-10099K, [REDACTED] The EM-EL-06 Radar at the Emba Missile Test Center (TOP SECRET RUFF/[REDACTED]) 25X1  
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10. IS 79-10107K, [REDACTED] SS-11 ICBM Training at the Ostrov SS-4 Launch Training Position 2 (TOP SECRET RUFF) 25X1
11. IS 79-10104K, [REDACTED] Concealment Attempts at Chinese Permanent CSS-1 and CSS-2 Missile Launch Sites (TOP SECRET RUFF) 25X1
12. IS 79-10090K, [REDACTED], Coal Mining Activity and Thermal Power Plant Construction in the Kansk-Achinsk Basin, USSR (TOP SECRET RUFF/[REDACTED]) 25X1  
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13. IS 79-10098K, [REDACTED] Status of Selected Soviet Thermal Power Plants (TOP SECRET RUFF) 25X1

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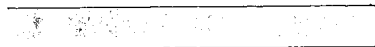
15. IS 79-10059K, [REDACTED] Refined Dimensions of the SS-N-6 Submarine-Launched Ballistic Missile (TOP SECRET RUFF) 25X1
16. IS 79-10103K, [REDACTED] Search for Evidence of High Explosive Testing in Brazil (TOP SECRET RUFF/[REDACTED]) 25X1  
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17. IS 79-10115K, [REDACTED] New Tunneling Activity in Western Pakistan (TOP SECRET RUFF) 25X1
18. IS 79-10086K, [REDACTED] Reported Underwater Explosive Test Facility at Semipalatinsk Identified as a Grain Processing Yard (TOP SECRET RUFF) 25X1

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